



State of Utah

Department of  
Environmental Quality

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DIVISION OF AIR QUALITY  
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11339

## Title V Operating Permit

**PERMIT NUMBER:** 4500071001

**DATE OF PERMIT:** June 19, 2001

Date of Last Revision: April 9, 2008

This Operating Permit is issued to, and applies to the following:

**Name of Permittee:**

Deseret Chemical  
AMSCM-OPDC-RM, Building 5108  
11500 Stark Road  
Stockton UT 84071

**Permitted Location:**

Deseret Chemical  
AMSCM-OPDC-RM, Building 5108  
11500 Stark Road  
Stockton UT 84071

UTM coordinates: 388855 m Easting, 4465334 m Northing  
SIC code: 9711 (National Security)

### UTAH AIR QUALITY BOARD

By:

Prepared By:

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M. Cheryl Heying, Executive Secretary

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Robert Grandy

## **ENFORCEABLE DATES AND TIMELINES**

The following dates or timeframes are referenced in  
Section I: General Provisions of this permit.

Annual Certification Due: June 18, and on that date of every calendar year that this permit is in force.

Renewal application due: December 19, 2005

Permit expiration date: June 19, 2006

Definition of “prompt”: written notification within 14 days.

## **ABSTRACT**

The primary mission of the Deseret Chemical Depot (DCD), a United States Army installation, is storage of a large percentage of the United States stockpile of chemical munitions. The Tooele Chemical Agent Disposal Facility (TOCDF) and Chemical Agent Munitions Disposal System (CAMDS) are both located at DCD. The mission of TOCDF is to destroy the aging chemical munitions stockpile in storage at DCD. The mission of CAMDS was to develop and test new technology for demilitarization and disposal of toxic chemical munitions, develop a technical data package for use in design and construction of other similar plants, and process the unserviceable chemical munitions. Eight hazardous waste incinerators are located at DCD. Equipment supporting these incinerators and other activities at DCD include boilers, heaters, emergency generators, fuel storage tanks, laboratories, and brine dryers. DCD is a major source of HAPs, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO. Four boilers are subject to 40 CFR 60, Subpart Dc, and five of eight hazardous waste incinerators are subject to 40 CFR 63, Subpart EEE. Three of the hazardous waste incinerators are equipped with carbon beds for controlling mercury emissions. Three hazardous waste incinerators are not permitted to operate.

## **OPERATING PERMIT HISTORY**

<b>Permit/Activity</b>	<b>Date Issued</b>	<b>Recorded Changes</b>
Title V administrative amendment - enhanced AO (Project #OPP0113390019)	4/09/2008	<p>Changes:</p> <ol style="list-style-type: none"> <li>1) To add the PFS carbon beds.</li> <li>2) To add a 250 kW natural gas fired emergency generator.</li> <li>3) To add a 320 kW portable diesel generator.</li> <li>4) To clarify recordkeeping language for generators.</li> </ol>
Title V significant modification (Project #OPP0113390017)	1/22/2008	<p>Changes:</p> <ol style="list-style-type: none"> <li>1) Increase the Automatic Continuous Air Monitoring System (ACAMS) monitoring frequency from 5 minutes to 7 minutes;</li> <li>2) Clarify the method specified for calculating incinerator agent exhaust gas emission rates using ACAMS;</li> <li>3) Add Depot Area Air Monitoring System (DAAMS) as a method of demonstrating compliance with agent emission limits; and</li> <li>4) Revise the definition of "prompt reporting" for furnace operating temperatures.</li> <li>5) To update MACT condition for the CAMDS Metal Parts Furnace.</li> <li>6) Remove CMA-2 and CAMDS-3.</li> </ol>
Title V administrative amendment - enhanced AO (Project #OPP0113390016)	9/20/2007	<p>Additions: -Various diesel emergency generators from TOCDF, CMA, and CAMDS, consolidated under the heading: "Emergency Generators" - TOCDF MPF Cooldown Conveyor (designated as TOCDF-17). The emissions unit description has been added to. -Added sitewide condition requiring #2 diesel/fuel oil or better in all equipment permitted for diesel/fuel oil combustion. - NO<sub>x</sub> emissions requirements for the TOCDF LIC/MPF/DFS ( TOCDF-5) incinerators have been changed because VX is no longer being burned.-DAAMS tube analysis will be allowed for the TOCDF LIC/MPF/DFS ( TOCDF-5) incinerators if the ACAMS should malfunction.-DAAMS tube analysis will be allowed for the TOCDF Munitions Demilitarization</p>

		<p>Building ( TOCDF-13) if the ACAMS should malfunction.- Hours of usage of the Area 10 Diesel Generators ( A10-Gen-Diesel) shall now be calculated based on the 15th day of each month rather than the 1st day of the month. Changes: Incorporation of various changes resulting from issuance of Approval Order DAQE-AN0113390046-07 Deletions: -TOCDF Emergency Generators (TOCDF-7) eliminated. -The following 11 emissions units and associated permit conditions have been dropped from the Title V Permit:(1) CMA Emergency Generators (designated as CMA-1)(2) CMA &lt; 5 MMBtu/hr Gas-Fired Boilers/Heaters (designated as CMA-2)(3) CMA Bldg. 553 Air Filter System (designated as CMA-7)(4) CAMDS Backup Generators (designated as CAMDS-1)(5) CAMDS &lt; 1 MMBtu/hr Oil-Fired Boilers/Heaters (designated as CAMDS-3)(6) CAMDS Diesel-Fired Boilers (designated as CAMDS-4)(7) CAMDS Diesel Storage Tanks (designated as CAMDS-5)(8) CAMDS Lewisite Neutralization System (designated as CAMDS-6)(9) CAMDS Brine Reduction System (designated as CAMDS-7)(10) CAMDS Liquid Incineration (LIC) (designated as CAMDS-10)(11) CAMDS Deactivation Furnace System (DFS) (designated as CAMDS-11)- Deleted sitewide condition requiring Sulfur content of any oil no greater than 0.5 % by weight.- Removed the pre 40 CFR Part 63, Subpart EEE operating temperatures for the TOCDF LIC/MPF/DFS ( TOCDF-5) incinerators. The operating temperatures are now set and revised as per the requirements of 40 CFR Part 63, Subpart EEE.- Removed the compliance plan for the TOCDF LIC/MPF/DFS ( TOCDF-5) incinerators. The requirements of the plan have been met.- Removed the pre 40 CFR Part 63, Subpart EEE operating temperatures for the CAMDS Metal Parts Furnace ( CAMDS-9). The operating temperatures are now set and revised as per the requirements of 40 CFR Part 63, Subpart EEE.- Removed the compliance plan for the CAMDS Metal Parts Furnace ( CAMDS-9) incinerator. The requirements of the plan have been met.</p>
Title V administrative amendment by source (Project #OPP0113390014)	6/19/2006	<p>Changes: Consolidation of conditions from two AO's (DAQE-AN1339040-06 and DAQE- AN1339041-06) into one AO (DAQE-AN1339043-06)Addition of two 45 kW diesel generators to Area 10.</p>
Title V administrative amendment by source (Project #OPP0113390013)	5/2/2006	<p>Changes: Update AO number DAQE-AN1339037-05 to DAQE-AN1339040-06 Update AO number DAQE-AN1339039-05 to DAQE-AN1339041-06 Change CMA Emergency Generators description from 50 kW to 54 kW.Add CMA Paint Booth and visible emissions monitoring of that unit.Add TOCDF MPF Support LaboratoryAdd TOCDF Maintenance Ventilation Hood</p>

		Remove TOCDF Gas-Fired Steam and Hot Water Boilers: Two propane- or natural gas-fired process steam boilers rated at 20.1 MMBtu/hr each. Remove TOCDF Brine Reduction SystemRemove Ozone Disinfection SystemClarify visible emissions monitoring for CAMDS Pressure Washer. Correct rule citation form 201-1(3) to 201-3
Title V significant modification (Project #OPP0113390012)	8/3/2005	Changes: Update AO number DAQE-AN1339038-05 to DAQE-AN1339039-05 (CMA generators and Area 10 ).Revise sitewide definition for prompt reporting from 7-days to 14-days.Establish a quarterly prompt-reporting schedule for the CO condition on the LIC/MPF/DFS furnaces.Remove CMA Deaerator from emissions unit description list.Emissions unit description for Area 10 Generator is revised to include the following words: ...with a maximum rating of;Remove 1650 degrees F secondary chamber temperature requirement for the liquid injection incinerator (CAMDS-10). That unit is out of service and undergoing RCRA closure.Remove Six Ventilation Filtration Systems (VFSs) (designated as VFS) from emissions unit description list.
Title V administrative amendment by source (Project #OPP0113390011)	3/25/2005	Changes: To incorporate various AO changes:-Change 'SBCOM' to CMA;-Change Address;-Add Generator to Area-10;-Add Filter system to Area-10;-Remove MTS Equipment;-Change II.A.25 CMA Emergency Generators, '...miscellaneous small diesel-fired generators with a combined rating no greater than 5 kW' to '...no greater than 50 kW.'-Delete 300 hour operation limit for CMA Emergency Generators;-Add 80 kW generator to 'TOCDF Emergency Generators';-The acronym SEL has been substituted twice for the acronym ASC in TOCDF LIC/MPF/DFS Agent Monitoring Condition.-The acronyms STEL and VSL have been added to the carbon bed conditions for the Chemical Assessment Laboratory; and-The acronym SEL has been substituted three times for the acronym ASC in the TOCDF Munitions Demilitarization Building Agent Monitoring Condition.
Title V administrative amendment by source (Project #OPP0113390010)	11/11/2004	Changes: To add miscellaneous small diesel fired generators to the SBCCOM equipment list.
Title V significant modification (Project #OPP0113390009)	8/2/2004	Changes: to incorporate conditions for 40 CFR Part 63, Subpart EEE compliance date extension.
Title V administrative amendment by source (Project #OPP0113390008)	5/3/2004	Changes: for revision of the SBCOM equipment list to reflect removal and installation of various boilers. The modification also takes the CAMDS LIC and CAMDS DFS out of service. For the incinerators subject to 40 CFR Part 63, Subpart EEE, the compliance date is extended to September 30, 2004.

Title V administrative amendment by DAQ (Project #OPP0113390007)	8/22/2002	Changes: to revise the heat input rating for one boiler located as the Soldier and Biological Chemical Command. This boiler is no longer subject to 40 CFR 60 Subpart Dc.
Title V administrative amendment by DAQ (Project #OPP0113390006)	6/20/2002	Changes: Changes to the Tooele Chemical Agent Disposal Facility site include: (1) increase the NO <sub>x</sub> emission limit for the chemical agent incinerators; (2) add a standby diesel-fired internal combustion engine (ICE); (3) revise the monitoring provisions to document compliance with the incinerator chemical agent emission limits; (4) update compliance date for 40 CFR 63 Subpart EEE; (5) update incinerator temperature requirements; (6) remove incinerator duct fugitive emission opacity limit; (7) clarify that agent emission limits are evaluated based on each automatic continuous air monitoring system (ACAMS) reading; and (8) update the emergency generator conditions to reflect current Division of Air Quality (DAQ) policy.
Title V administrative amendment by source (Project #OPP0113390005)	4/2/2002	Changes: Extend flaring hours for Lewisite Neutralization System and add a pressure washer under DAQE-159-02. Also revise compliance date for 40 CFR 63 Subpart EEE to September 30, 2003, pursuant to 66 FR 63317, December 6, 2001.
Title V administrative amendment by source (Project #OPP0113390003)	10/30/2001	Changes: Administrative amendment to add new and modified conditions from DAQE-508-01 and DAQE-703-01.
Title V administrative amendment by source (Project #OPP0113390002)	7/17/2001	Changes: replace a 500 kW diesel-fired emergency generator with a 750 kW diesel-fired emergency generator.
Title V initial application (Project #OPP0113390001)	6/19/2001	

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**Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.**

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

## **SECTION I: GENERAL PROVISIONS**

### **I.A Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

### **I.B Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

### **I.C Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

**I.D Permit Expiration and Renewal.**

I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

**I.E Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

**I.F Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

**I.G Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

**I.H No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

**I.I Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

**I.J Inspection and Entry.**

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

**I.K Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

**I.L Compliance Certification.**

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered

by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
1595 Wynkoop Street  
Denver, CO 80202-1129

**I.M Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

**I.N Emergency Provision.**

I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O **Operational Flexibility.**
- Operational flexibility is governed by R307-415-7d(1).
- I.P **Off-permit Changes.**
- Off-permit changes are governed by R307-415-7d(2).
- I.Q **Administrative Permit Amendments.**
- Administrative permit amendments are governed by R307-415-7e.
- I.R **Permit Modifications.**
- Permit modifications are governed by R307-415-7f.
- I.S **Records and Reporting.**
- I.S.1 Records.
- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall

record the following information, where applicable: (R307-415-6a(3)(b)(i))

- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
  - I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
  - I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
  - I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit.. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
- I.S.3 Notification Addresses.
  - I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality  
P.O. Box 144820  
Salt Lake City, UT 84114-4820  
Phone: 801-536-4000
  - I.S.3.a All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications:

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and Environmental Justice

(mail code 8ENF)  
1595 Wynkoop Street  
Denver, CO 80202-1129

For reports, notifications, or other correspondence related to permit modifications, applications, etc.:

Environmental Protection Agency, Region VIII  
Office of Partnerships & Regulatory Assistance Air & Radiation Program (mail code 8P-AR)  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: 303-312-6440

**I.T Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

**I.U Inventory Requirements.**

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

**I.V Title IV and Other, More Stringent Requirements**

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))





## **SECTION II: SPECIAL PROVISIONS**

- II.A **Emission Unit(s) Permitted to Discharge Air Contaminants.**  
(R307-415-4(3)(a) and R307-415-4(4))
- II.A.1 **Permitted Source (Source-wide).**
- II.A.2 **Tooele Chemical Agent Disposal Facility**  
(TOCDF-0). Tooele Chemical Agent Disposal Facility (TOCDF) is an approximately 40 acre facility built to destroy chemical weapons. TOCDF includes emission units TOCDF-1 through 22.
- II.A.3 **TOCDF Liquid Incinerator 1**  
(TOCDF-1). Liquid injection incinerator (LIC) 1 treats drained liquid agent, spent decontamination solution, and agent contaminated liquids. The LIC pollution abatement system (PAS) includes a quench tower, venturi scrubber, packed bed scrubber, and demister. The LIC PAS filtration system (PFS) consists of pre-filters, HEPA filters, and sulfur-impregnated carbon filters.
- II.A.4 **TOCDF Liquid Incinerator 2**  
(TOCDF-2). LIC 2 treats drained liquid agent, spent decontamination solution, and agent contaminated liquids. The LIC PAS includes a quench tower, venturi scrubber, packed bed scrubber, and demister. The LIC 2 PFS consists of pre-filters, HEPA filters, and sulfur-impregnated carbon filters.
- II.A.5 **TOCDF Metal Parts Furnace**  
(TOCDF-3). The metal parts furnace (MPF) treats munitions casings, contaminated metal containers, and miscellaneous agent contaminated wastes. The MPF PAS includes a quench tower, venturi scrubber, packed bed scrubber, and demister. The MPF PFS consists of pre-filters, HEPA filters, and sulfur-impregnated carbon filters.
- II.A.6 **TOCDF Deactivation Furnace System**  
(TOCDF-4). The deactivation furnace system (DFS) treats explosive components, mines, and explosively contaminated maintenance waste. The DFS PAS includes a cyclone, quench tower, venturi scrubber, packed bed scrubber, and demister.
- II.A.7 **TOCDF LIC/MPF/DFS**  
(TOCDF-5). This group includes the liquid incinerators (TOCDF-1 and 2), deactivation furnace system (TOCDF-4), metal parts furnace (TOCDF-3) and common stack.
- II.A.8 **TOCDF Portable Standby Generator**  
(TOCDF-6). One diesel-fired standby internal combustion engine (ICE) rated at not more than 600 hp. This ICE is portable and will be brought on site as needed.
- II.A.9 **Emergency Generators**  
Twenty Five diesel-fired emergency generators rated at:-80, 1700, 1700, 275, and 260 kW (TOCDF) -20, 45, 50, 60, 60, 60, 135, 275, 350, and 550 kW (CMA)-65, 125, 235, 235, 300, 300, 750, 750, 750, and 1270 kW (CAMDS). -Also includes miscellaneous small diesel-fired generators with a combined rating no greater than 54 kW (CMA).One 250 kW natural gas fired generator.
- II.A.10 **TOCDF < 5 MMBtu/hr Gas-Fired Boilers/Heaters**  
(designated as TOCDF-8). Natural gas- or liquified petroleum gas-fired boilers and heaters rated

at less than 5 MMBtu/hr located at the TOCDF.

- II.A.11      **TOCDF Gas-Fired Steam and Hot Water Boilers**  
(designated as TOCDF-9). Two propane or natural gas-fired hot water boilers rated at 17.0 MMBtu/hr each. All units are subject to 40 CFR 60 Subpart Dc.
- II.A.12      **TOCDF Chemical Assessment Laboratory**  
(designated as TOCDF-12). Work with hazardous chemical vapors and agents is conducted in the Chemical Assessment Laboratory (CAL). Emission are controlled by a dual bed carbon adsorption unit rated at 22,000 acfm with a max bed velocity of 10 feet per second.
- II.A.13      **TOCDF Munitions Demilitarization Building**  
(designated as TOCDF-13). Munitions are prepared for treatment in the munitions demilitarization building (MDB). MDB air is exhausted to a media particulate filter bank, a HEPA filter bank, 6 activated carbon filter banks, a HEPA filter bank, and a stack in series.
- II.A.14      **TOCDF Treaty Compliance Building**  
(designated as TOCDF-14). The Treaty Compliance Building (TCB) carbon bed and stack control emissions of potentially hazardous chemical vapors and toxic chemical agents that are handled under fume hoods or are present in contaminated clothing. No unit-specific applicable requirements.
- II.A.15      **TOCDF Personnel Maintenance Building**  
(designated as TOCDF-15). The Personnel Maintenance Building (PMB) has a filter system associated with the medical clinic. The filter system is intended to supply positive pressure clean air to the medical clinic in the event that there is agent contamination of the ambient air. No unit-specific applicable requirements.
- II.A.16      **TOCDF Residue Handling Area**  
(designated as TOCDF-16). Residues are collected in bins and moved to the residue handling area (RHA). The residues handled in RHA include, but are not limited to DFS ash. Emissions from the RHA are controlled by a baghouse.
- II.A.17      **TOCDF MPF Cooldown Conveyor**  
(designated as TOCDF-17) Treated containers, trays, drained munitions, and residues from miscellaneous decontaminated wastes are cooled in the MPF cool down conveyor. The conveyor is located in the MPF fugitive emission enclosure. Emissions from the cool down conveyor area will be routed and vented out of a maximum of three exhaust ducts (A11, A76 & A77). Each exhaust duct will have a 6,000 cfm fan and filter with a minimum Efficiency Reporting Value (MERV) rating of 12.
- II.A.18      **TOCDF Filter Testing Equipment**  
(designated as TOCDF-19). Filter testing equipment using R-11 or substitute material with a lower ozone depleting potential. No unit-specific applicable requirements.
- II.A.19      **TOCDF LPG Flare**  
(designated as TOCDF-20). Used to burn off propane when the LPG vaporizer is initially engaged. Used when natural gas supply is curtailed or safety concerns warrant its use.
- II.A.20      **TOCDF Fuel Storage Facilities**  
(designated as TOCDF-21). Four uncontrolled diesel tanks with storage capacities of approximately 300, 500, 500, and 4000 gallons. One 53,000 gallon pressurized storage vessel for liquid petroleum gas. No unit-specific applicable requirements.

- II.A.21      **TOCDF Raw Material and Process Tanks**  
(designated as TOCDF-22). Various non-volatile organic liquid tanks including three 80,000 gal 18% sodium hydroxide solution tanks, one 15,000 gal 12% sodium hypochlorite solution tank, and four 40,000 gal scrubber brine tanks. Other process tanks at < 5,000 gallons each. No unit-specific applicable requirements.
- II.A.22      **TOCDF Best Available Control Technology Units**  
(designated as TOCDF-23). Except as specified in R307-413, emission units that were not in existence prior to 11/29/69, and emission units that made modifications or relocations since 11/29/69. These units include those identified under TOCDF-0 except TOCDF-8 and TOCDF-20.
- II.A.23      **TOCDF MPF Support Laboratory**  
(designated as TOCDF-24). Located in the Process Utilities Building (PUB). This lab performs the preparation and analysis of MPF exhaust gas samples per the requirements of 40 CFR 75 Appendix K. Agent analyses are not permitted for this laboratory. No unit-specific applicable requirements.
- II.A.24      **TOCDF Maintenance Ventilation Hood**  
(designated as TOCDF-25). This hood is located in Building S-4, and is used to remove fumes evolving from equipment painted exclusively by brush. The spraying of paint is not performed or allowed under this ventilation hood. No unit-specific applicable requirements.
- II.A.25      **Chemical Material Agency (CMA)**  
(designated as CMA-0). CMA provides support services to TOCDF and the Chemical Agent Munitions Disposal System (CAMDS). The CMA-0 includes emission units CMA-3 through 10.
- II.A.26      **CMA < 1 MMBtu/hr Oil-Fired Boilers/Heaters**  
(designated as CMA-3). Oil-fired boilers and heaters rated at less than 1 MMBtu/hr located at CMA.
- II.A.27      **CMA Natural Gas/Oil-Fired Boilers**  
(designated as CMA-4). Four (4) natural gas/diesel fired boilers rated at 3.1, 3.1, 3.75, and 3.75 MMBtu/hr.
- II.A.28      **CMA Unleaded Fuel Tank**  
(designated as CMA-5). One unleaded fuel tank. No unit-specific applicable requirements.
- II.A.29      **CMA Diesel Fuel Tanks**  
(designated as CMA-6). Two diesel #2 fuel tanks. No unit-specific applicable requirements.
- II.A.30      **CMA Bldg. 1810 Air Filter System**  
(designated as CMA-8). Air filter system on building 1810 operating rated at 1,300 acfm. No unit-specific applicable requirements.
- II.A.31      **CMA Best Available Control Technology Unit**  
(designated as CMA-9). Except as specified in R307-413, emission units that were not in existence prior to 11/29/69, and emission units that made modifications or relocations since 11/29/69. These units include those identified under CMA-0 except CMA-3.
- II.A.32      **CMA Paint Booth**  
(designated as CMA-10). Paint booth in Building 4005 equipped with paint arrestor filters.
- II.A.33      **Chemical Agent Munitions Disposal System**

(designated as CAMDS-0). The Chemical Agent Munitions Disposal System (CAMDS) was a facility built to evaluate chemical weapon destruction systems. CAMDS includes emission units CAMDS-2, CAMDS-12, CAMDS-13, and CAMDS-14.

- II.A.34      **CAMDS < 5 MMBtu/hr Gas-Fired Boilers/Heater**  
(designated as CAMDS-2). Natural gas- or liquified petroleum gas-fired boilers and heaters rated at less than 5 MMBtu/hr located at the CAMDS.
- II.A.35      **CAMDS Metal Parts Furnace**  
(designated as CAMDS-9). The MPF treats contaminated: munitions casings, bulk items, metal containers, and miscellaneous wastes. Exhaust gases from the MPF are controlled by the MPF stack and PAS (quench tower, venturi scrubber, packed bed scrubber, and demister).
- II.A.36      **CAMDS Filter Testing Equipment**  
(designated as CAMDS-12) Filter testing equipment using R-11 or substitute material with a lower ozone depleting potential. No unit-specific applicable requirements.
- II.A.37      **CAMDS Pressure Washer**  
(designated as CAMDS-13). One diesel-fired boiler rated at 0.35 MMBtu/hr and one 16 hp gasoline-fired pump engine.
- II.A.38      **CAMDS Best Available Control Technology Units**  
(designated as CAMDS-14). Except as specified in R307-413, emission units that were not in existence prior to 11/29/69, and emission units that made modifications or relocations since 11/29/69. These units include those identified under CAMDS-0 except CAMDS-2, and CAMDS-12.
- II.A.39      **Area-10 Air Filter System**  
(designated as A10-Filters). Air filter system located in Area-10. One primary filter and one back-up filter. Each rated at about 12,400 acfm.
- II.A.40      **Area 10 Natural Gas Generator**  
(designated as A10-Gen). One natural gas fired generator with a maximum rating of 240 kW.
- II.A.41      **Area 10 Diesel Generators**  
(designated as A10-Gen-Diesel). Two Diesel fired generators with a maximum rating of 45 kW each.
- II.A.42      **Power Generator**  
One diesel fired portable generator with a maximum rating of 320 kW.

## II.B Requirements and Limitations

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:

### II.B.1 Conditions on permitted source (Source-wide).

#### II.B.1.a **Condition:**

The permittee shall burn #2 diesel/fuel oil or better in all equipment permitted for diesel/fuel oil combustion. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

#### II.B.1.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

#### II.B.1.a.2 **Recordkeeping:**

Fuel receipts shall be maintained to demonstrate usage of the following low-sulfur fuel oil and/or Diesel: Grade No. 1, Grade No.2, Grade Low Sulfur No. 1, Grade Low Sulfur No. 2. These records and the results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

#### II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2 Conditions on TOCDF LIC/MPF/DFS ( TOCDF-5).

#### II.B.2.a **Condition:**

Hours of operation for LIC1, LIC2 and DFS shall be no greater than 6,000 hours per rolling 12 month period each while feeding hazardous waste (HW) as defined in 40 CFR 261.3 or R315-2-3. Hours of operation for the MPF shall be no greater than 8,424 hours per rolling 12 month period while feeding hazardous waste (HW) as defined in 40 CFR 261.3 or R315-2-3. [Authority granted under R307- 401- 8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.a.1

**Monitoring:**

By the 15th day of each month, the permittee shall calculate the total hours of HW operations in the previous 12 months for each affected emission unit. The hours of HW operations shall be determined by supervisor's monitoring and maintenance of an operations log. For each HW operation in each affected emission unit, the log shall include the time and date the operation starts, the time and date the operation ended, the duration of the operation in hours, and the types and quantities of HW fed to the affected emission unit.

II.B.2.a.2

**Recordkeeping:**

Records of monitoring shall be kept on a daily basis during operations. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b

**Condition:**

The permittee shall use only natural gas as a primary fuel and propane as a secondary fuel in the affected emission units for preheat and temperature trimming. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.b.2

**Recordkeeping:**

For each time period when a fuel other than natural gas is combusted in an affected emission unit for preheat and temperature trimming, the permittee shall record the start and end dates of the time period, type of fuel combusted over the time period, and justification for using propane, if applicable. These records shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

**Condition:**

The affected emissions units shall comply with 40 CFR 63 Subpart EEE. The minimum operating temperatures for each incinerator (including individual primary and secondary chamber temperatures) shall be those specified in the current Notice of Compliance or approved performance test plan applicable to each incinerator as required in the 40 CFR 63 Subpart EEE. The permittee shall also comply with all applicable requirements of 40 CFR 63 Subpart A as given in Table 1 of 40 CFR 63 Subpart EEE. [Authority granted under 40 CFR 63 Subpart EEE; condition originated in 40 CFR Part 63, Subpart EEE].

II.B.2.c.1

**Monitoring:**

The permittee shall comply with all applicable performance testing and monitoring requirements of 40 CFR 63 Subparts A and EEE including but not limited to those given in 40 CFR 63.1207 through 1209.

II.B.2.c.2

**Recordkeeping:**

The permittee shall comply with all applicable record keeping requirements of 40 CFR 63 Subparts A and EEE including but not limited to those given in 40 CFR 63.1211. These records and results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.c.3

**Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 63 Subparts A and EEE, as applicable, including but not limited to those given in 40 CFR 63.1210 and 1211. For purposes of I.S.2.c. of this permit, prompt for this condition shall be defined as per 40 CFR 63.10 and 40 CFR 63.1206.

II.B.2.d

**Condition:**

Emissions of PM shall be no greater than:

- (a) 1.0 lbs/hr and 0.02 grains/dscf corrected to 7% O<sub>2</sub> for LIC1;
- (b) 1.0 lbs/hr and 0.02 grains/dscf corrected to 7% O<sub>2</sub> for LIC2;
- (c) 0.75 lbs/hr and 0.02 grains/dscf corrected to 7% O<sub>2</sub> for MPF; and
- (d) 2.55 lbs/hr and 0.02 grains/dscf corrected to 7% O<sub>2</sub> for DFS.

[Authority granted under R307- 401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.d.1

**Monitoring:**

Stack testing shall be performed as specified below for each affected emission unit:

(a) Frequency. Emissions shall be tested at least every five years, based on the date of the most recent stack test.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(2) Sample Method - 40 CFR 60, Appendix A, Method 5 or 5I shall be used to determine the particulate matter concentration and emission rate.

(d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.d.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.2.d.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.e

**Condition:**

Emissions of SO<sub>2</sub> shall be no greater than:

(a) 9.5 lbs/hr for LIC1;

(b) 9.5 lbs/hr for LIC2;

(c) 1.0 lbs/hr for MPF; and

(d) 1.0 lbs/hr for DFS.

[Authority granted under R307- 401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].



II.B.2.e.1

**Monitoring:**

Stack testing shall be performed as specified below for each affected emission unit:

(a) Frequency. Emissions shall be tested at least every five years, based on the date of the most recent stack test.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission concentration.

(3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.

(d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.e.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.2.e.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

**II.B.2.f Condition:**

Emissions of CO shall be no greater than:

- (a) 1.52 lbs/hr and 100 ppm<sub>dv</sub> at 7% O<sub>2</sub> over an HRA for LIC1;
- (b) 1.52 lbs/hr and 100 ppm<sub>dv</sub> at 7% O<sub>2</sub> over an HRA for LIC2;
- (c) 1.45 lbs/hr and 100 ppm<sub>dv</sub> at 7% O<sub>2</sub> over an HRA for MPF; and
- (d) 4.84 lbs/hr and 100 ppm<sub>dv</sub> at 7% O<sub>2</sub> over an HRA for DFS.HRA - Hourly Rolling Average.

[Authority granted under R307- 401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

**II.B.2.f.1 Monitoring:**

No later than September 30, 2003, the CO emission concentration expressed in ppm<sub>vd</sub> @ 7% O<sub>2</sub> HRA from each affected emission shall be determined using continuous emission monitoring systems (CEMSs) installed and operated in accordance with 40 CFR 63 Subpart EEE and R307-170. In addition, the CO emission rate expressed in lbs/hr from each affected emission unit shall be determined as specified below:

(a) Frequency. Emissions shall be tested at least every five years, based on the date of the most recent stack test.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Methods.

(1) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(2) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.

(3) CO emission concentration shall be determined using the CEM.

(d) Calculations. The CO emission rate during each test run and each affected emission unit shall be calculated as the product of all required conversion factors (i.e., those for temperature, pressure, oxygen, moisture, units, etc.), average of the CEMS CO emission concentrations over the test run, and the exhaust gas flow rate.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**II.B.2.f.2 Recordkeeping:**

The permittee shall keep the records specified in R307-170-8, 40 CFR 63 Subpart EEE, and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

II.B.2.f.3

**Reporting:**

The permittee shall comply with the reporting provisions in R307-170-7(5), R307-170-9, 40 CFR 63 Subpart EEE and Section I of this permit. For the purposes of I.S.2.c of this permit, prompt for this condition shall be defined as written notification by January 30, April 30, July 30, and October 30 for any deviations which occurred during the quarter which ended 30 days earlier. The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status.

II.B.2.g

**Condition:**

Emissions of NO<sub>x</sub> from the common stack shall be no greater than 96.3 tons per rolling 12-month period during any rolling 12-month period that VX is not combusted in one or more affected emission units. [Authority granted under R307- 401- 8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.g.1

**Monitoring:**

While the affected emission unit is operating, hourly NO<sub>x</sub> emission rates expressed in tons per hour shall be determined in accordance with R307-170 using the appropriate conversion factors. The applicable performance specification in R307-170 shall be 40 CFR 60, Appendix B, Performance Specification 6 - "Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources". By the 15th day of each month a new 12-month NO<sub>x</sub> emission total for the common stack shall be calculated as the sum of the monthly NO<sub>x</sub> emission totals for each of the previous 12 months. Each monthly NO<sub>x</sub> emission total shall be calculated as the sum of the hourly NO<sub>x</sub> emission rates times one plus the monitor unavailability, expressed as a fraction, over the corresponding month.

II.B.2.g.2

**Recordkeeping:**

The permittee shall keep the records specified in R307-170-8 and any additional records required by provision I.S.1 of this permit. These records shall be maintained in accordance with Provision I.S.1.

II.B.2.g.3

**Reporting:**

The permittee shall comply with the reporting provisions in R307-170-9 and any additional reporting provisions contained in Section I of this permit.

II.B.2.h

**Condition:**

Visible emissions shall be no greater than 10 percent opacity from the affected emission units common stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.h.1

**Monitoring:**

An opacity determination shall be conducted once in each quarter that the affected emission unit is operated. The opacity determination shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.2.h.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.h.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.i

**Condition:**

The maximum emissions of the following chemical agents shall not be exceeded, values are multiplied by 1E-06 lb/hr <sup>[1]</sup>:

Unit	GB	VX	Mustard*
LIC1	13	14	1,500
LIC2	13	14	1,500
MPF	6.6	9.5	1,000
DFS	38	38	1,700

\*Mustard includes agents H/HD/HT

GB - Sarin

VX - Sulfinated Organophosphorus

<sup>[1]</sup> Compliance evaluated based on each ACAMS reading and not the average of ACAMS readings over an hour. If ACAMS readings are unavailable due to ACAMS malfunction and/or equipment failure, DAAMS analysis may be used to demonstrate compliance with agent emission rates. In the event of an ACAMS alarm, DAAMS analysis may be used to confirm the presence of agent. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.2.i.1

**Monitoring:**

Agent continuous emission monitoring at each affected emission unit shall be performed as specified below:

(a) Location.

Agent concentrations for the affected emission unit shall be measured at the following locations:

(a.1) in the exhaust gas duct before the exhaust gases are mixed with the exhaust gases from another emission unit; and

(a.2) in the main stack. Exhaust gas flow rate shall be measured in the main stack. Each data recorder shall be located such that an inspector/operator can safely read the output.

(b) Frequency.

The concentration of each agent shall be measured at location (a.1) at least once every 7 minutes or sooner during each hazardous waste incineration period that the agent is incinerated.

Exhaust gas flow rate and the concentration of each agent shall be measured at location (a.2) at least once every 7 minutes or sooner during each agent demilitarization period that the agent is present.

The HW incineration period is the period extending from the time when HW feed to the affected emission unit starts until the HW residence time has transpired. The HW residence time means the time elapsed from cutoff of the flow of HW into the affected emission unit (including, for example, the time required for liquids to flow from the cutoff valve into the affected emission unit) until solid, liquid, and gaseous materials from the HW, excluding residues that may adhere to combustion chamber surfaces, exit all combustion chambers at the affected emission unit. If the affected emission unit has multiple firing systems whereby the HW residence time may vary for the firing systems, the HW residence time for purposes of complying with this subpart means the longest HW residence time for any firing system in use at the affected emission unit at the time of HW cutoff.

The agent demilitarization period is the period extending from the time when agent is brought to the munitions demilitarization building until the time when agent is removed from the munitions demilitarization building and the munitions demilitarization building is certified 3X.

(c) Methods

(c.1) Exhaust gas flow rate. The exhaust gas flow rate at location (a.2) shall be the exhaust gas flow rate used to determine compliance with the NO<sub>x</sub> emission limitation at the main stack. The exhaust gas flow rate at each furnace duct, location (a.1), shall be the exhaust gas flow rate as measured by the V-cone at each individual furnace duct.

(c.2) Agent concentrations. Agent concentrations shall be measured by Automatic Continuous Air Monitoring Systems (ACAMS). The emission concentration of each agent fed to the affected emission unit during each HW incineration period shall be measured at measurement location (a.1). ACAMS shall operate at location (a.1) at all times during each HW incineration period.

The emission concentration of each agent brought to the munitions demilitarization building during each agent demilitarization period shall be measured at measurement location (a.2). ACAMS at location (a.2) shall operate at all times during each agent demilitarization period.

The detection limit at locations (a.1) and (a.2) for each agent shall be less than or equal to 20% of the Source Emissions Limit (SEL). The SEL for GB, VX, and Mustard (H/HD/HT) are 0.0003, 0.0003, and 0.03 mg/m<sup>3</sup>, respectively.

(d) Calibration.

Each ACAMS at location (a.1) shall be challenged at least once per day during each HW incineration period by injecting a dilute agent sample at the SEL into the ACAMS sample line or sample port. The agent injected shall include at least one of the agents fed to the incinerator during the current HW incineration period.

Each ACAMS at location (a.2) shall be challenged at least once per day during each agent demilitarization period by injecting a dilute agent sample at the allowable stack concentration (ASC) into the ACAMS sample line or sample port. The agent injected shall include at least one of the agents brought to the munitions demilitarization building during the current agent demilitarization period. The measured concentration shall be within +/- 25% of the dilute agent standard concentration.

(e) Calculations.

Agent emission rates shall be calculated and expressed in lbs/hr whenever agent is detected by ACAMS and confirmed through DAAMS analysis. Calculations shall be made at furnace

exhaust ducts (a.1) where agent is detected. Calculations shall be made at the Common Stack (a.2) if agent is detected at (a.2.). Agent emission rate calculations shall:

- (1) use the product of all necessary conversion factors (i.e., those for temperature, pressure, units, etc.).
  - (2) use applicable measurements of exhaust gas flow rate per (c.1) above, at the location where agent is detected
  - (3) use the ACAMS concentration (if confirmed by DAAMS) at the location where agent is detected.
- (f) ACAMS Unavailability.

In the absence of ACAMS agent concentration readings, DAAMS tubes may be analyzed to determine agent concentration. If DAAMS results are reported at a value greater than the DAAMS analytical method reporting limit, then the agent emission rate shall be calculated. Agent emission rate calculations during the ACAMS unavailability shall:

- (1) use the product of all necessary conversion factors (i.e., those for temperature, pressure, units, etc.).
- (2) use applicable measurements of exhaust gas flow rate per (c.1) above, at the location where agent is detected
- (3) use the total mass of agent on the DAAMS tube, divided by the volume of the exhaust gas sampled during the time period when the ACAMS was known to be unavailable, for agent concentration.

Calculations shall be made at furnace exhaust ducts (a1) where agent is detected and/or at the Common Stack (a.2).

#### II.B.2.i.2

##### **Recordkeeping:**

For each HW incineration period at each affected emission unit, the permittee shall record the following information: the time and date HW feed started; time and date HW feed stopped; time and date the HW residence time transpired; name of each firing system used; and the name of each agent fed to the affected emission unit. The permittee shall also record the calculated HW residence time for each firing system at each affected emission unit and documentation supporting these calculations.

For each agent demilitarization period at the munitions demilitarization building, the permittee shall record the following information: the time and date agent brought to munitions demilitarization building; time and date agent removed from munitions demilitarization building; time and date the munitions demilitarization building is certified 3X; and the name of each agent brought to the munitions demilitarization building.

These records and all other records required by section I.S.1 of this permit shall be maintained in accordance with section I.S.1.

II.B.2.i.3

**Reporting:**

In addition to the reporting requirements of Section I of this permit, all instances of an agent exceeding an emission limit shall be reported to the Executive Secretary verbally within three hours of the exceedance, if reasonable, but in no case longer than 18 hours after the beginning of the exceedance. During times other than normal office hours, exceedances shall be initially reported to the Environmental Health Emergency Response Coordinator.

Within seven calendar days of an agent exceeding an emission limit, a written report shall be submitted to the Executive Secretary. The report shall include the estimated quantity of agent emitted to the atmosphere.

II.B.3

**Conditions on TOCDF Portable Standby Generator ( TOCDF-6).**

II.B.3.a

**Condition:**

Hours of operation shall be no greater than 500 hours/rolling 12 month period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.3.a.1

**Monitoring:**

By the 15th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for each affected emission unit. Hours of operation for each affected emission unit shall be determined by an hour meter and/or a log.

II.B.3.a.2

**Recordkeeping:**

Records shall be kept on a monthly basis for each affected emission unit. These records and the 12 month totals shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b

**Condition:**

Visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.3.b.1

**Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.3.b.2

**Recordkeeping:**

Records of visual observations performed and data required by 40 CFR 60, Appendix A, Method 9 for each determination shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4

**Conditions on Emergency Generators (Generators).**

II.B.4.a

**Condition:**

Emergency generators shall be used for electricity producing operation only during the periods when electric power from the public utilities is interrupted or during maintenance. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.4.a.1

**Monitoring:**

Hours of operation for each affected emission unit shall be determined by an hour meter and/or a log.

II.B.4.a.2

**Recordkeeping:**

For each affected unit, the permittee shall record the total hours used each month by the 15th day of the following month.

II.B.4.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b

**Condition:**

For the diesel emergency generators, visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [Authority granted under R307-201-3; condition originated in R307-201-3].



II.B.4.b.1

**Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.4.b.2

**Recordkeeping:**

The permittee shall keep a log which includes the location and description of each affected emission unit. For each quarter for each affected emission unit, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.c

**Condition:**

For the natural gas fired emergency generator, visible emissions shall be no greater than 10 percent opacity [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.4.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.c.2

**Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The permittee shall update the records and log required by this condition by the 15th day of the following month.

II.B.4.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5

**Conditions on TOCDF < 5 MMBtu/hr Gas-Fired Boilers/Heaters ( TOCDF-8).**

II.B.5.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.5.a.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.a.2

**Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.5.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6

**Conditions on TOCDF Gas-Fired Steam and Hot Water Boilers ( TOCDF-9).**

II.B.6.a

**Condition:**

The permittee shall use only natural gas as a primary fuel and propane as a secondary fuel in the affected emission units. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.6.a.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.a.2

**Recordkeeping:**

For each time period when a fuel other than natural gas is combusted in an affected emission unit, the permittee shall record the start and end dates of the time period, type of fuel combusted over the time period, and justification for using secondary fuel. These records shall be maintained as described in Provision I.S.1 of this permit.

II.B.6.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.6.b Condition:**

The permittee shall keep records of the amounts of each fuel combusted each day, for each affected emission unit. [Authority granted under 40 CFR 60.48c(g); condition originated in 40 CFR 60.48c(g)].

**II.B.6.b.1 Monitoring:**

Fuel consumption for each affected emissions unit shall be determined by using a fuel meter.

**II.B.6.b.2 Recordkeeping:**

Records of the amounts of each fuel combusted during each day for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

**II.B.6.b.3 Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.6.c Condition:**

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [Authority granted under 40 CFR 60 (Subpart A); condition originated in 40 CFR 60 Subpart A].

**II.B.6.c.1 Monitoring:**

Records required for this permit condition will serve as monitoring.

**II.B.6.c.2 Recordkeeping:**

All applicable records and notifications required by 40 CFR 60 Subpart A shall be maintained in accordance with provision I.S.1 of this permit.

**II.B.6.c.3 Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A.

**II.B.6.d Condition:**

Visible emissions shall be not greater than 10 % opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

**II.B.6.d.1 Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.d.2

**Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.d.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7

**Conditions on TOCDF Chemical Assessment Laboratory ( TOCDF-12).**

II.B.7.a

**Condition:**

Visible emissions shall be no greater than 5 percent opacity from the affected emission unit's stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.7.a.1

**Monitoring:**

An opacity observation of each emission point subject to this provision shall be performed quarterly when the affected unit is operating. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from an emission point, an opacity determination of that emission point shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.7.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.7.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.7.b Condition:**

Visible emissions shall be no greater than 5 percent opacity from any fugitive emission point associated with lab ventilation air handling system or control equipment at the affected emission unit. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

**II.B.7.b.1 Monitoring:**

A visual survey of the affected emission unit shall be performed quarterly when the unit is operating. The survey shall be conducted by an individual trained on the observation procedures of 58 FR 61640 Method 203A. If visible emissions other than condensed water vapor are observed from an emission point, an opacity determination of that emission point shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 58 FR 61640 Method 203A using a 6-minute averaging time.

**II.B.7.b.2 Recordkeeping:**

The permittee shall record the date of each visual survey. The permittee shall also keep a log of the following information for each observed visual emission: date and time visual emissions observed, emission point location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 58 FR 61640 Method 203A shall be maintained in accordance with Provision I.S.1 of this permit.

**II.B.7.b.3 Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.7.c Condition:**

The carbon beds in the affected emission unit shall be replaced when any agent is detected between the first and second beds at a concentration greater than 1 Vapor Screening Level (VSL) or 1 Short Term Exposure Limit (STEL). Filter monitoring is performed at the VSL, which is equivalent to the STEL, to detect evidence of filter degradation.

STEL is defined as the maximum concentration to which unprotected chemical workers may be exposed to or up to 15 minutes continuously. For GB, the STEL is  $1 \times 10^{-4}$  mg/m<sup>3</sup>, four times daily. For VX, the STEL is  $4 \times 10^{-6}$  mg/m<sup>3</sup>, four times daily. However, due the technical capabilities or existing air monitoring technologies, it has been adjusted to  $1 \times 10^{-5}$  mg/m<sup>3</sup>, one time daily. For mustard, the STEL is  $3 \times 10^{-3}$  mg/m<sup>3</sup>, one time daily. The used carbon beds shall be disposed in an approved incinerator or another manner approved by the Executive Secretary. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

**II.B.7.c.1 Monitoring:**

During each day that chemical agent operations are conducted, the permittee shall sample the exhaust air from the affected emission unit between the first and second carbon beds using Depot Area Air Monitoring Systems (DAAMS). Within 72 hours of the end of sampling, the DAAMS solid sorbent tube between the first and second carbon bed will be analyzed for chemical agents.

II.B.7.c.2

**Recordkeeping:**

For each day which included chemical agent operations, a log shall be maintained which includes the following information:

a.1 Date; and

a.2 Was a DAAMS sample collected between first and second carbon bed and sent to be analyzed for chemical agents?

These records and all other records required by Provision I.S.1 of this permit shall be maintained as described in Provision I.S.1.

II.B.7.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8

**Conditions on TOCDF Munitions Demilitarization Building ( TOCDF-13).**

II.B.8.a

**Condition:**

Emissions from the ventilation system at the affected unit shall not exceed the following rates:

Agent*	Emission Limit, lbs/hr <sup>[1]</sup>
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GB	110E-06
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VX	110E-06
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Mustard	11,000E-06*
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Mustard includes agents H/HD/HT

GB - Sarin

VX - Sulfinated Organophosphorus

<sup>[1]</sup> Compliance evaluated based on each ACAMS reading and not the average of ACAMS readings over an hour. If ACAMS readings are unavailable due to ACAMS malfunction and/or equipment failure, DAAMS analysis may be used to demonstrate compliance with agent emission rates. In the event of an ACAMS alarm, DAAMS analysis may be used to confirm the presence of agent. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08 ].

#### II.B.8.a.1

##### **Monitoring:**

Agent continuous emission monitoring at the affected emission unit shall be performed as specified below:

- (a) Location. Agent concentrations shall be measured in the exhaust gas duct for the affected emission unit. Each data recorder shall be located such that an inspector/operator can safely read the output.
- (b) Frequency. The concentration of each agent shall be measured at least once every 7 minutes or sooner during each agent demilitarization period that the agent is present at the affected emission unit. The agent demilitarization period is the period extending from the time when agent is brought to the affected emission unit until the time when agent is removed from the affected emission unit and the affected emission unit is certified 3X.
- (c) Methods. Agent concentrations shall be measured by Automatic Continuous Air Monitoring Systems (ACAMS). The emission concentration of each agent present at the affected emission unit during each agent demilitarization period shall be measured. The ACAMS shall operate at all times during each agent demilitarization period. The detection limit at location (a) for each agent shall be less than or equal to 20% of the Source Emissions Limit (SEL). The SEL for GB, VX, and Mustard (H/HD/HT) are 0.0003, 0.0003, and 0.03 mg/m<sup>3</sup>, respectively.
- (d) Calibration. The ACAMS shall be challenged at least once per day during each agent demilitarization period by injecting a dilute agent sample at the SEL into the ACAMS sample line or sample port. The agent injected shall include at least one of the agents present at the affected emission unit. The measured concentration shall be within +/- 25% of the dilute agent standard concentration.
- (e) Calculations. If agent is detected and confirmed by DAAMS, the agent emission rate expressed in lbs/hr shall be calculated as the product of all necessary conversions factors (i.e., those for temperature, pressure, units, etc.), the maximum exhaust gas flow rate, and the measured agent concentration.

#### II.B.8.a.2

##### **Recordkeeping:**

For each agent demilitarization period at the affected emission unit, the permittee shall record the following information:

- the time and date agent brought to affected emission unit;
- time and date agent removed from affected emission unit;
- time and date the affected emission unit is certified 3X; and
- the name of each agent brought to the affected emission unit.

The permittee shall also keep records of the supporting calculations for the maximum flow rate. These records and all other records required by section I.S.1 of this permit shall be maintained in accordance with section I.S.1.



II.B.8.a.3

**Reporting:**

In addition to the reporting requirements of Section I of this permit, all instances of an agent exceeding an emission limit shall be reported to the Executive Secretary verbally within three hours of the exceedance, if reasonable, but in no case longer than 18 hours after the beginning of the exceedance. During times other than normal office hours, exceedances shall be initially reported to the Environmental Health Emergency Response Coordinator.

Within seven calendar days of an agent exceeding an emission limit, a written report shall be submitted to the Executive Secretary. The report shall include the estimated quantity of agent emitted to the atmosphere.

II.B.9

**Conditions on TOCDF Residue Handling Area ( TOCDF-16).**

II.B.9.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity from the affected emission unit's stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.9.a.1

**Monitoring:**

An opacity determination shall be conducted once in each quarter that the affected emission unit is operated. The opacity determination shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.9.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.9.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.10

**Conditions on TOCDF MPF Cooldown Conveyor ( TOCDF-17).**

II.B.10.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity from the affected emission unit's stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.10.a.1

**Monitoring:**

An opacity determination shall be conducted once in each quarter that the affected emission unit is operated. The opacity determination shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.10.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.10.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.11

**Conditions on TOCDF LPG Flare ( TOCDF-20).**

II.B.11.a

**Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.11.a.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.11.a.2

**Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.11.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.12

**Conditions on TOCDF Best Available Control Technology Units ( TOCDF-23).**

II.B.12.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under 40 CFR 60.11(d) and R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.12.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.12.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.12.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.13 **Conditions on CMA < 1 MMBtu/hr Oil-Fired Boilers/Heaters ( CMA-3).**

II.B.13.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.13.a.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.13.a.2 **Recordkeeping:**

The permittee shall keep a log which includes the location and description of each affected emission unit. For each quarter for each affected emission unit, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.13.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14

**Conditions on CMA Natural Gas/Oil-Fired Boilers ( CMA-4).**

II.B.14.a

**Condition:**

Hours of operation shall be no greater than 876 hours per rolling 12 month period for each affected emission unit while combusting oil. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.14.a.1

**Monitoring:**

By the 15th day of each month, the permittee shall calculate the hours of operation while combusting oil in the previous 12 months for each affected emission unit. Hours of operation while combusting oil for each affected emission unit shall be determined by an hour meter and/or a log.

II.B.14.a.2

**Recordkeeping:**

Records shall be kept on a monthly basis for each affected emission unit. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.14.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.14.b

**Condition:**

Visible emissions shall be no greater than 20 percent opacity when combusting oil and no greater than 10 percent opacity when combusting natural gas. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.14.b.1

**Monitoring:**

If an affected emission unit is operated with oil during a quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating with oil. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.14.b.2

**Recordkeeping:**

For each affected emission unit, the permittee shall record the following information: \

(a) For each quarter that oil is combusted:

(a.1) The date of the opacity observation and if visual emission other than condensed water vapor were observed; and

(a.2) For each observed visual emission other than condensed water vapor all records required by 40 CFR 60, Appendix A, Method 9.

(b) In lieu of monitoring via visible emission observations during natural gas combustion, one of the following sets of records:

(b.1) Documentation that the emission unit can only burn natural gas and oil;

(b.2) Documentation that fuels other than natural gas and oil cannot be supplied to the emission unit without modification of the fuel supply system; or

(b.3) For each quarter fuel bills or fuel meter readings that demonstrate only natural gas and/or oil were combusted in the emission unit.

The records required by this provision shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.15

**Conditions on CMA Best Available Control Technology Units ( CMA-9).**

II.B.15.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under 40 CFR 60.11(d) and R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.15.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.15.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.15.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.16 **Conditions on CMA Paint Booth ( CMA-10).**

II.B.16.a **Condition:**

Visible emissions shall be no greater than 20 % opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.16.a.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, the spray booth particulate capture system shall be inspected before each use to verify that it is functioning properly. Inspections shall consist of the following observations:

- (A) Inspection for holes in the particulate filters.
- (B) Inspection of the particulate filters to determine proper installation within the support rack.
- (C) Inspection of the exhaust fan to ensure that it is operating.

II.B.16.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.16.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.17      **Conditions on CAMDS < 5 MMBtu/hr Gas-Fired Boilers/Heaters ( CAMDS-2).**

II.B.17.a      **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.17.a.1      **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.17.a.2      **Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.17.a.3      **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.18      **Conditions on CAMDS Metal Parts Furnace ( CAMDS-9).**

II.B.18.a      **Condition:**

The combined chemical feed rate of the agents (GB, VX, Mustard and GA), material contaminated with agents and material containing agents shall not exceed the following rates:

- 1)      387 lbs of combustible solids and liquids per charge.
- 2)      800,000 lbs of combustible solids and liquids per rolling 12-month period\*.

\*This amount shall not contain more than 50,000 lbs of materials contaminated with GA.[Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.18.a.1

**Monitoring:**

The weight of each chemical agent fed to the affected emission unit shall be determined each hour by adding, as applicable:

- (1) The weight of chemical agent for each item of known composition and weight; and
- (2) The weight of chemical agent determined by chemical analysis or manufacturer specification and mass flow meter or weight scale measurement for each item of unknown composition and weight.

By the 15th day of each month, the permittee shall calculate the total weight expressed in pounds of each chemical agent and all chemical agents fed to the affected emission unit in the previous 12 months.

II.B.18.a.2

**Recordkeeping:**

Records shall be kept on a hourly basis for each affected emission unit during operations. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.18.b

**Condition:**

The permittee shall use only natural gas as a primary fuel and propane as a secondary fuel in the affected emission units for preheat and temperature trimming. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.18.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.18.b.2

**Recordkeeping:**

For each time period when a fuel other than natural gas is combusted in an affected emission unit for preheat and temperature trimming, the permittee shall record the start and end dates of the time period, type of fuel combusted over the time period, and justification for using propane, if applicable. These records shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.



II.B.18.c

**Condition:**

The affected emissions units shall comply with 40 CFR 63 Subpart EEE.

The minimum operating temperatures for each incinerator (including individual primary and secondary chamber temperatures) shall be those specified in the current Notice of Compliance or approved performance test plan applicable to each incinerator as required in the 40 CFR 63 Subpart EEE.

The permittee shall also comply with all applicable requirements of 40 CFR 63 Subpart A as given in Table 1 of 40 CFR 63 Subpart EEE. [Authority granted under 40 CFR 63 Subpart EEE; condition originated in 40 CFR Part 63, Subpart EEE].

II.B.18.c.1

**Monitoring:**

The permittee shall comply with all applicable performance testing and monitoring requirements of 40 CFR 63 Subparts A and EEE.

II.B.18.c.2

**Recordkeeping:**

The permittee shall comply with all applicable record keeping requirements of 40 CFR 63 Subparts A and EEE. Records and results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.c.3

**Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 63 Subparts A and EEE, as applicable. For purposes of I.S.2.c. of this permit, prompt for this condition shall be defined as per 40 CFR 63.10 and 40 CFR 63.1206.

II.B.18.d

**Condition:**

Scrubber solution shall be no less than 8 pH during the HW incineration period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.18.d.1

**Monitoring:**

(a) Location. The pH measurement location shall be in the scrubber liquid recirculation loop. The pH measurement data recorder shall be located such that an inspector/operator can safely read the output.

(b) Frequency. The pH shall be measured at least once every 30 minutes during each hazardous waste (HW) incineration period, as defined in this permit.

II.B.18.d.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.18.d.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

- II.B.18.e Condition:**
- Venturi pressure drop shall be no less than 36 inches of water column during the HW incineration period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].
- II.B.18.e.1 Monitoring:**
- (a) Location. The pressure drop shall be measured across the PAS venturi. The pressure drop measurement data recorder shall be located such that an inspector/operator can safely read the output.
- (b) Frequency. The pressure drop shall be measured at least once every 15 seconds during each hazardous waste (HW) incineration period, as defined in this permit.
- II.B.18.e.2 Recordkeeping:**
- Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.18.e.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.18.f Condition:**
- Total brine/water flow rate shall be no less than 76 gallons per minute during the HW incineration period. The quench tower and venturi brine/water flow rates must be included in the total. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].
- II.B.18.f.1 Monitoring:**
- (a) Location. The total flow rate of water or brine to the quench tower and the venturi shall be measured. The flow rate measurement data recorder shall be located such that an inspector/operator can safely read the output.
- (b) Frequency. The total flow rate shall be measured at least once every 15 seconds during each hazardous waste (HW) incineration period, as defined in this permit.
- II.B.18.f.2 Recordkeeping:**
- Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.18.f.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.18.g Condition:**
- Emissions of PM<sub>10</sub> shall be no greater than 0.24 lbs/hr and 0.016 grains/dscf (36.61 mg/dscm) from the affected emission unit's stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].
- II.B.18.g.1 Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. The initial and proceeding PM<sub>10</sub> stack testing shall be conducted as follows:

(a.1) Except as provided by paragraphs i and ii below (i.e., data in lieu of), the permittee must commence the initial PM<sub>10</sub> stack test during the initial comprehensive performance test which is conducted not later than six months after the compliance date of 40 CFR 63 Subpart EEE.

i. The permittee may request that previous PM<sub>10</sub> stack test data serve as documentation of conformance with the PM<sub>10</sub> standard of this provision provided that the previous PM<sub>10</sub> stack test was conducted during a performance test: initiated after March 30, 1998; for the purpose of demonstrating emissions under a RCRA permit issuance or reissuance proceeding under part 270 of this chapter; in conformance with the requirements of 40 CFR 63.1207(g)(1); and sufficient to establish the applicable operating parameter limits under 40 CFR 63.1209.

ii The permittee must submit PM<sub>10</sub> stack test data in lieu of conducting a PM<sub>10</sub> stack test during the initial comprehensive performance test with the notification of performance test required under 40 CFR 63.1207(e) or with the performance test data submitted in lieu of the notification of performance test.

(a.2) The permittee must commence the next PM<sub>10</sub> stack test during the next comprehensive performance test which is conducted no later than 61 months after the date of commencing the previous comprehensive performance test. If the permittee submits PM<sub>10</sub> stack test data in lieu of conducting a PM<sub>10</sub> stack test during the initial comprehensive performance test, the permittee must commence the subsequent PM<sub>10</sub> stack test during the subsequent comprehensive performance test which is conducted within 61 months of commencing the performance test used to provide the data in lieu of the initial comprehensive performance test.

(b) Notification. At least 45 days prior to conducting a PM<sub>10</sub> stack test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.

(c) Methods.

(1) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201A. 40 CFR 51, Appendix M, Method 202 shall be used to determine condensibles.

(2) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5 or 5I as appropriate. All of the front half catch shall be considered PM<sub>10</sub>. Condensibles shall be determined using the back half catch.

(3) The condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

(d) Calculations. To determine the mass emission rate expressed in lbs/hr, the PM<sub>10</sub> concentration shall be multiplied by the exhaust gas flow rate and any necessary conversion factors.

(e) Test Conditions. All tests shall be conducted while the affected unit is operating at the maximum hazardous waste feed rate at which the affected unit will be operated. During the tests, the source shall burn hazardous waste and maintain process conditions representative of normal operations. If multiple test conditions will be conducted during the performance test, PM<sub>10</sub> emissions shall be quantified during each test condition or the worst case test condition for PM<sub>10</sub> as documented in the test protocol.

II.B.18.g.2

**Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.18.g.3

**Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.18.h

**Condition:**

Visible emissions shall be no greater than 20 percent opacity from the affected emission unit's stack. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.18.h.1

**Monitoring:**

An opacity determination shall be conducted once in each quarter that the affected emission unit is operated. The opacity determination shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.18.h.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.18.h.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.19

**Conditions on CAMDS Pressure Washer ( CAMDS-13).**

II.B.19.a

**Condition:**

Hours of operation shall be no greater than 320 hours/rolling 12 month period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.19.a.1

**Monitoring:**

By the 15th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for each affected emission unit. Hours of operation for each affected emission unit shall be determined by an hour meter and/or a log.

II.B.19.a.2

**Recordkeeping:**

Records shall be kept on a monthly basis for each affected emission unit. These records and the 12 month totals shall be maintained as described in Provision I.S.1 of this permit.

II.B.19.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.19.b

**Condition:**

The gasoline fired pump engine shall operate with no visible emissions. Visible emissions from the diesel fired boiler shall be no greater than 20 percent opacity. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.19.b.1

**Monitoring:**

If an affected emission unit is operated during a quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at anytime during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, Method 203B (58 FR 61640) shall be performed by a certified observer within 24 hours of the initial visual emission observation.

II.B.19.b.2

**Recordkeeping:**

The permittee shall keep a log which includes the location and description of each affected emission unit. For each quarter for each affected emission unit, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date Method 203B conducted, and Method 203B results. The records required by this provision and all data required by 58 FR 61640 Method 203B shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.19.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.20

**Conditions on CAMDS Best Available Control Technology Units ( CAMDS-14).**

II.B.20.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under 40 CFR 60.11(d) and R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.20.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.20.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.20.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.21 **Conditions on Area-10 Air Filter System ( A10-Filters).**

II.B.21.a **Condition:**

The carbon beds in the Area 10 air filter system shall be replaced when any agent is detected between the first and second beds at a concentration greater than 1 Vapor Screening Level (VSL) or 1 Short Term Exposure Limit (STEL). Filter monitoring is performed at the VSL, which is equivalent to the STEL, to detect evidence of filter degradation. The carbon replacement is only required for the filter system (i.e., primary or backup) that is confirmed by DAAMS that exceed 1 VSL or 1 STEL. STEL is defined as the maximum concentration to which unprotected chemical workers may be exposed to or up to 15 minutes continuously. For GB, the STEL is  $1 \times 10^{-4}$  mg/m<sup>3</sup>, four times daily. For VX, the STEL is  $4 \times 10^{-6}$  mg/m<sup>3</sup>, four times daily. However, due the technical capabilities or existing air monitoring technologies, it has been adjusted to  $1 \times 10^{-5}$  mg/m<sup>3</sup>, one time daily for VX. For mustard, the STEL is  $3 \times 10^{-3}$  mg/m<sup>3</sup>, one time daily. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.21.a.1 **Monitoring:**

During each day that chemical agent operations are conducted, the DCD shall sample the exhaust air from the affected emission unit between the first and second carbon beds using Depot Area Air Monitoring Systems (DAAMS). Within 72 hours of the end of the sampling, the DAAMS solid sorbent tube between the first and second carbon bed will be analyzed for chemical agents.

II.B.21.a.2

**Recordkeeping:**

For each day that included chemical agent operations, a log shall be maintained which includes the following information:

- a) Date
- b) Was a DAAMS sample collected between the first and second carbon bed, and sent to be analyzed for chemical agents?

II.B.21.a.3

**Reporting:**

Monitoring reports shall be submitted to the Executive Secretary every six months in addition to the reporting requirements specified in Section I of this permit.

II.B.21.b

**Condition:**

If agent is detected at the exhaust stack of the carbon beds in the Area 10 air filter system, then operations shall be immediately stopped or the exhaust from the Area 10 filter system shall be switched to the backup filter immediately. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.21.b.1

**Monitoring:**

During each day that chemical agent operations are conducted, the DCD shall sample the exhaust air from the affected emission unit at the exhaust stack using the Automatic Continuous Air Monitoring System (ACAMS).

II.B.21.b.2

**Recordkeeping:**

All instances of detection at the exhaust stack shall be recorded in accordance with Provision I.S.1 of this permit.

II.B.21.b.3

**Reporting:**

All instances of breakthrough beyond the carbon filter bank to the exhaust stack shall be reported to the Executive Secretary telephonically within three hours of the agent being detected by the ACAMS and confirmed by DAAMS if reasonable, but in no case longer than 18 hours after the beginning of the confirmed agent detection. During times other than normal office hours, confirmed agent detections shall be initially reported to the Environmental Health Emergency Response Coordinator.

Within 14 calendar days of the beginning of confirmed agent detection at the exhaust stack, a written report shall be submitted to the Executive Secretary. The report shall include the estimated quantity of agent passing through both the carbon filter bank and any release from the entire system into the atmosphere.

The permittee shall also comply with the reporting requirements specified in Section I of this permit.

II.B.22

**Conditions on Area 10 Natural Gas Generator ( A10-Gen).**

II.B.22.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.22.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.22.a.2 **Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn natural gas and/or liquified petroleum gas;
- (2) Documentation that the fuels other than natural gas and/or liquified petroleum gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only natural gas and/or liquified petroleum gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.22.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.23 **Conditions on Area 10 Diesel Generators ( A10-Gen-Diesel).**

II.B.23.a **Condition:**

Hours of operation for each affected emissions unit shall be no greater than 4,000 hours/ rolling 12 month period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.23.a.1 **Monitoring:**

Based on the 15th day of each month, DCD shall calculate the total hours of operation in the previous 12 months for each emissions unit. Hours of operation for each affected emissions unit shall be determined by an hour meter and/or a log.

II.B.23.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.



II.B.23.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.23.b

**Condition:**

Visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.23.b.1

**Monitoring:**

If an affected emission unit is operated during a calendar year, an opacity observation of the emission unit shall be performed in the calendar year that the emission unit was operated. The opacity observation can be conducted at anytime during the calendar year. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.23.b.2

**Recordkeeping:**

Results of observations and all data required by 40 CFR, Part 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.23.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.24

**Conditions on Power Generator.**

II.B.24.a

**Condition:**

Hours of operation shall be no greater than 650 hours/ rolling 12 month period. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN011339047-08].

II.B.24.a.1

**Monitoring:**

Based on the 15th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for each emissions unit. Hours of operation for each affected emissions unit shall be determined by an hour meter and/or a log.

II.B.24.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.24.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.24.b

**Condition:**

Visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [Authority granted under R307-201-3; condition originated in R307-201-3].

II.B.24.b.1

**Monitoring:**

If an affected emission unit is operated during a calendar year, an opacity observation of the emission unit shall be performed in the calendar year that the emission unit was operated. The opacity observation can be conducted at anytime during the calendar year. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.24.b.2

**Recordkeeping:**

Results of observations and all data required by 40 CFR, Part 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.24.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C

**Emissions Trading**

(R307-415-6a(10))

Not applicable to this source.

II.D

**Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

II.E

**Source-specific Definitions.**

The following definitions apply to the permittee. They include terms not defined in state or federal rules or clarify or expand on existing definitions.

### **SECTION III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

### **SECTION IV: ACID RAIN PROVISIONS**

IV.A            **This source is not subject to Title IV. This section is not applicable.**

## **REVIEWER COMMENTS**

This operating permit incorporates all applicable requirements contained in the following documents:

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Incorporates	DAQE-AN011339047-08 dated February 23, 2008
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1. Comment on an item originating in regarding  
Fuel oil sulfur limitation R307-203-1 : Fuel oil sulfur limitation of 0.85 lb/MM Btu required by R307-203-1 is satisfied by the permit requirement to burn #2 diesel or better. [Last updated April 2, 2008]
2. Comment on an item originating in regarding  
Method 203A and C Certification: Methods 203A and C require that opacity determinations be conducted by a certified observer. Since the certification procedures are virtually identical to Method 9, certification on Method 9 will serve as certification for Methods 203A and C. [Last updated April 2, 2008]
3. Comment on an item originating in regarding  
Rapid Response System Not Included in Permit - Rapid Response System Not Included in Permit: DAQE-596-99 : The subject approval order allows the operation of the rapid response system at the affected emission unit. The rapid response system is a mobile source and has not been included in the permit. [Last updated April 2, 2008]
4. Comment on an item originating in regarding CMA Natural Gas/Oil-Fired Boilers  
Visible Emissions - DAQE-AN011339047-08: The approval order limits visible emissions from the boilers to 10% opacity when combusting natural gas and 20% opacity when combusting fuel oil. If only natural gas is combusted during a quarter no visible emission observations are required. However, if fuel oil is combusted during a quarter, a visible emission observation is required. [Last updated April 2, 2008]
5. Comment on an item originating in regarding TOCDF Gas-Fired Steam and Hot Water Boilers  
60.11(d) Operation and Maintenance: The affected emission units are NSPS units under 40 CFR 60 Subpart Dc and are required to comply with the operation and maintenance requirements of 60.11(d). The operation and maintenance requirements of 60.11(d) are the same as those given in the AO for TOCDF. Therefore, the operation and maintenance requirements of the AO and 60.11(d) have been combined and applied to the TOCDF which includes the affected emission units. [Last updated April 2, 2008]
6. Comment on an item originating in regarding TOCDF MPF Support Laboratory  
Visible Emissions: DAQE-AN011339047-08: It is reasonably expected that there will be no visible emissions from lab analyses conducted within this unit. Hence, a visible emissions limit for this unit is not included in this permit. [Last updated April 2, 2008]
7. Comment on an item originating in regarding TOCDF Maintenance Ventilation Hood  
Visible Emissions: DAQE-AN011339047-08: It is reasonably expected that there will be no visible emissions from brush painting conducted under this hood. Hence, a visible emissions limit for this unit is not included in this permit. [Last updated April 2, 2008]

